Table 1. Precipitation in Pauma Valley 1952 to 2006

Water year	Total Precipitation (inches)	Water year	Total Precipitation (inches)
1952	24.00	1980	30.83
1953	12.61	1981	9.38
1954	15.04	1982	15.39
1955	11.87	1983	24.90
1956	10.10	1984	14.62
1957	12.05	1985	13.35
1958	23.14	1986	17.88
1959	6.07	1987	10.41
1960	11.69	1988	14.27
1961	3.52	1989	9.32
1962	14.09	1990	11.21
1963	6.84	1991	17.26
1964	12.91	1992	15.87
1965	12.74	1993	32.17
1966	15.69	1994	13.38
1967	10.77	1995	27.14
1968	16.32	1996	6.83
1969	14.79	1997	31.51
1970	8.46	1998	29.81
1971	12.21	1999	10.20
1972	9.97	2000	8.56
1973	20.70	2001	14.07
1974	12.37	2002	6.00
1975	11.81	2003	17.50
1976	13.43	2004	11.50
1977	9.23	2005	31.05
1978	31.62	2006	13.00
1979	20.89		

Table Notes:

Rainfall measurements were collected in immediate vicinity of the Rancho Pauma Mutual Water Company offices.

Table 2. Water Production by Rancho Pauma Mutual Water Company 1998 through 2006

Water Year	Production (acre feet)
1998	2042
1999	2832.6
2000	3340
2001	2798.1
2002	3128.9
2003	2796.2
2004	2978.5
2005	2402
2006	N/A

Table 3. Depth to Standing Water in Rancho Pauma Mutual Water Company Wells 1990 through 2006

Year	Well 7R	Well 11	Well 14R	Well 30	Well 31R	Well 32R	Well 33	Well 34	Well 35	Well 36	Well 37	Well 38	Well 39
1990	106.2	130.0	61.5	78.6	98.2	78.7	--	--	--	--	--	--	--
1991	107.9	113.3	--	71.4	100.4	75.9	56.3	--	--	--	--	--	--
1992	113.3	134.9	--	--	106.0	92.9	75.9	92.4	--	94.2		--	--
1993	81.7	109.6	31.3	45.9	70.2	54.0	28.4	55.4	--	53.1	53.4	--	--
1994	75.1	85.4	21.9	33.0	63.9	41.5	27.4	40.6	56.9	54.0	40.8	--	--
1995	65.7	71.9	22.4	28.9	58.6	34.2	16.4	34.1	49.9	47.1	37.9	--	--
1996	86.8	95.0	38.3	41.9	92.0	51.8	36.0	49.2	79.0	57.3	56.5	--	--
1997	97.7	89.7	50.5	62.7	89.2	--	41.7	70.0	56.6	71.6	72.6	--	--
1998	81.3	84.3	29.8	--	82.9	46.6	26.4	50.0	68.5	63.3	49.6	57.3	--
1999	89.6	91.4	33.9	--	86.6	59.0	33.6	54.2	74.8	73.8	59.8	47.8	59.2
2000	108.3	119.9	60.6	--	92.4	71.5	54.2	73.9	96.4	87.3	78.0	70.0	77.6
2001	117.8	125.7	95.0	--	96.2	75.2	65.2	89.1	97.7	95.5	92.7	75.7	87.5
2002	132.2	142.4	110.0	--	108.1	105.1	--	107.7	114.9	119.5	100.0	102.1	108.8
2003	133.1	141.2	114.3	113.2	101.3	113.2	--	116.8	112.0	123.2	101.3	110.1	114.4
2004	149.0	153.7	121.2	120.8	119.3	120.2	--	123.1	119.8	128.4	113.5	116.2	120.8
2005	131.7	127.5	82.8	79.0	102.6	75.6	--	81.0	110.0	88.7	96.4	78.3	83.1
2006	--	131.7	85.7	75.3	100.6	76.5	--	81.5	--	91.0	88.4	75.9	--

Notes:
Depth to standing water level was measured in feet below the well measuring point in July of each year.
"--" indicates that a measurement is not available.

Figure 1 Annual Precipitation in Pauma Valley 1952 to 2005

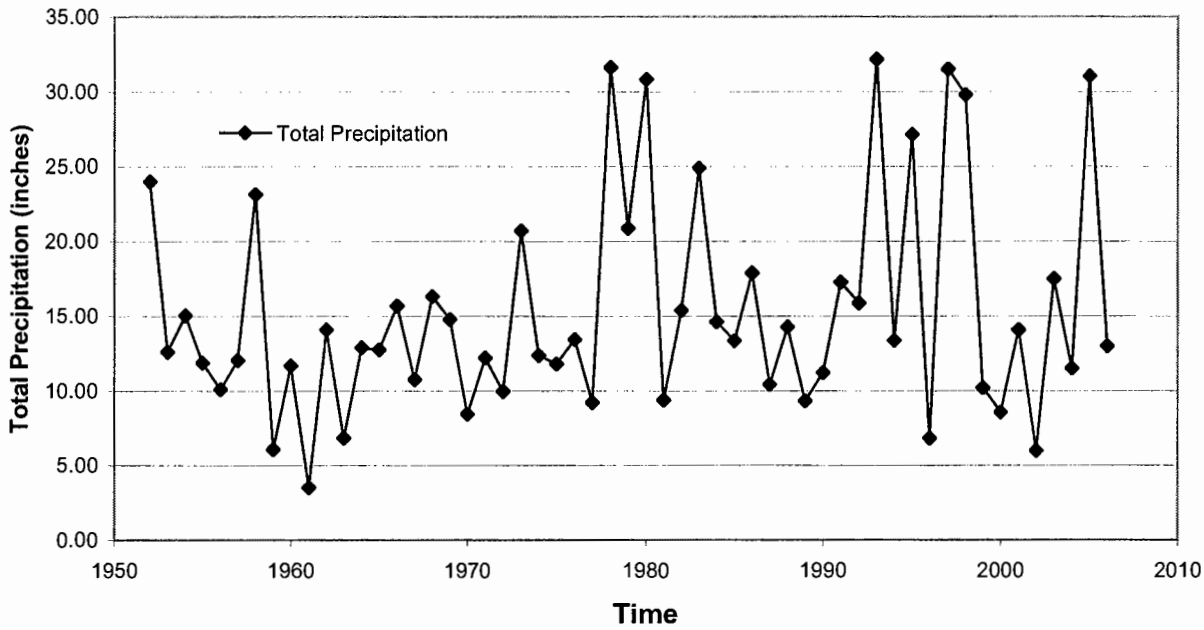


Figure 2 Annual Precipitation 1952 to 2006 - Departure from Normal

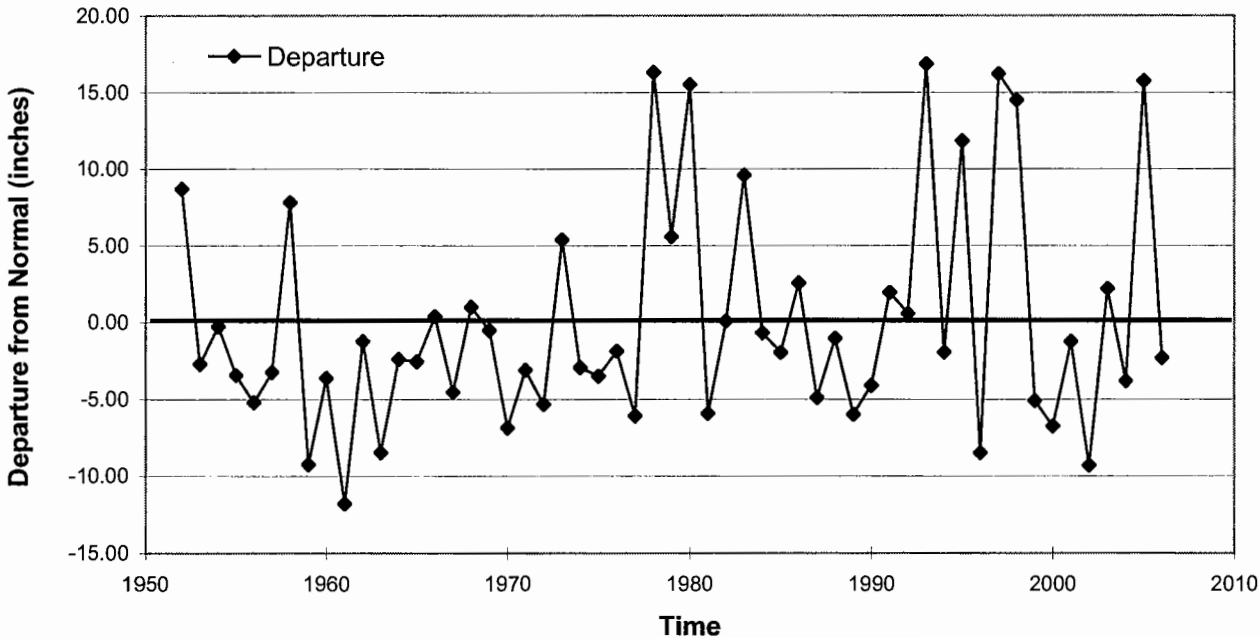


Figure 3. Standing Water Levels in Rancho Pauma Mutual Water Company Production Wells 1989 to 2006

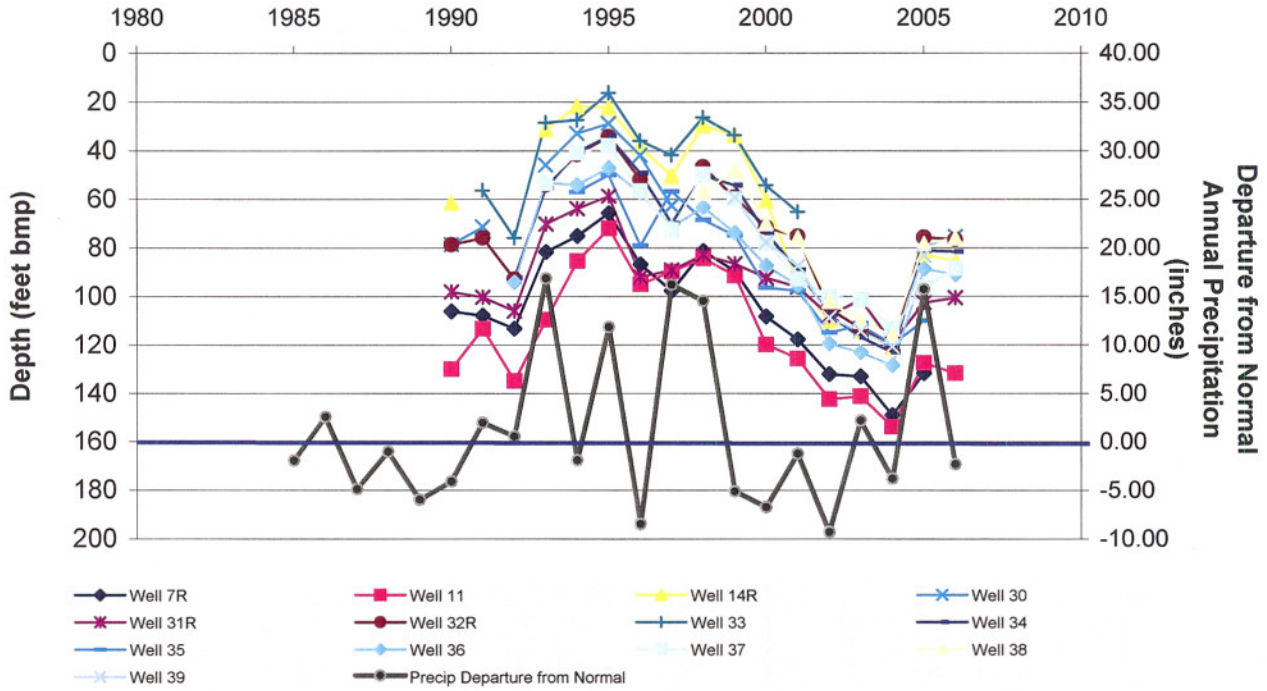
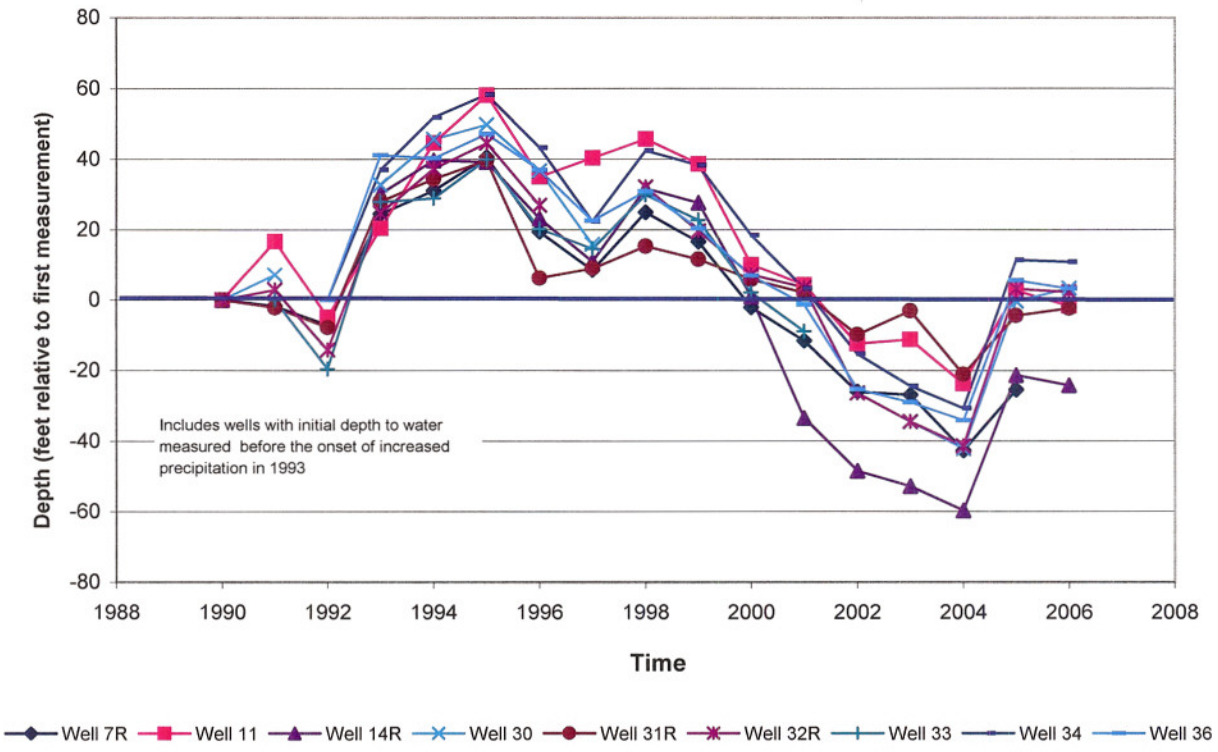


Figure 4. Normalized July Standing Water Levels in Rancho Pauma Mutual Water Company Production Wells 1989 to 2006



COUNTY OF SAN DIEGO
DEPARTMENT OF HEALTH SERVICES

#8481

WELL PERMIT APPLICATION

130-100-19
APN 130-100-17
130-100-20
Control # 1030400

TYPE OF WORK (Check)	USE (Check)	EQUIPMENT (Check)
New Well [X]	Individual Domestic [ ]	Rotary Mud [X]
Repair or Modification [ ]	Agricultural [ ] Community [ ]	Cable Tool [ ]
Time Extension [ ]	Industrial [X] Other Commercial	Other [ ]
Destruction [ ]		

PROPOSED WELL DEPTH
Max. 300 Min. 200 (Feet)

PROPOSED CASING
Type Steel Depth 50ft. Diameter 26" O.D. Wall or Gage .250"

PROPOSED SEALING ZONE(S)
From 0 to 50 Feet
From ____ to ____ Feet
From ____ to ____ Feet

PROPOSED PERFORATIONS OR SCREEN
From 200 to 300 Feet
From ____ to ____ Feet
From ____ to ____ Feet
From ____ to ____ Feet

SEALING MATERIAL (Check)
Neat Cement Grout [ ] Bentonite Clay [ ]
Sand Cement Grout [ ] Concrete [X]
Other-Specify: ____

DATE OF WORK
Start 11/14/90
Completion 12/28/90

130-100-12

NAME OF WELL OWNER ~~Hidden Oaks Farms~~ (Richard & Peggy Lee Nabers) 15833 Hwy 76

NAME OF WELL DRILLER Rex Anderson

LOCATION OF WELL Pauma Valley, Ca 92061 — Same —

COMPANY Rex Anderson Corp.

DISPOSITION OF APPLICATION
(FOR HEALTH OFFICERS USE ONLY)

[ ] APPROVED [ ] DENIED

[X] APPROVED WITH CONDITIONS

Report Reason(s) for Denial or Necessary Conditions Here:

Well shall be installed to U.B. State of California Bulletin 74-90 and San Diego County Code. Call 565-5173 prior to pouring of seal.

J Hammerstrand
HEALTH OFFICER

11-13-90
DATE

BUSINESS ADDRESS
P.O. Box 384, Julian, Ca 92036

LICENSE NUMBER
A305739

Cash Deposit [ ]
Bond Posted [X]

$180 Fee paid on 11/13/90 JS
CK# 19948

I hereby agree to comply with all regulations of the Department of Health Services and with all ordinances and laws of the County of San Diego and of the State of California pertaining to well construction, repair, modification and destruction. Immediately upon completion of work I will furnish the Department of Health Services with a complete and accurate log of the well.

Rex Anderson
APPLICANT'S SIGNATURE

11/13/90
DATE

Mud

COUNTY OF SAN DIEGO
DEPARTMENT OF HEALTH SERVICES

WELL PERMIT APPLICATION

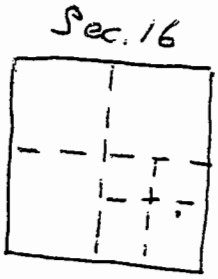
Control # W30400

130-100-17
Assessor's Parcel No. 130-100-19
130-100-20

LOCATION

INDICATE BELOW THE VICINITY AND EXACT LOCATION OF WELL WITH RESPECT TO THE FOLLOWING ITEMS: PROPERTY LINES, WATER BODIES OR WATER COURSES, DRAINAGE PATTERN, ROADS, EXISTING WELLS, SEWERS AND PRIVATE SEWAGE DISPOSAL SYSTEMS AND OTHER POTENTIAL CONTAMINATION SOURCES, INCLUDING DIMENSIONS.

Well site appears to be located in the SE 1/4 of the SE 1/4 of Sec. 16, T10S, R1W



48.8 AC

Hidden Oaks Farm
1582 Hwy 76
Pauma Valley, Ca

- Well site is approx. 600'± west of Hwy 76, 55' north of south property line, ± 240' from "Country Club Well"
- No septic systems are within hundreds of feet of this well site.
- No Heath Hazards Are Present

Cole Grade Rd.

Approx. .6 mile

Hwy 76

Property Line

New Building

(Open Field)

Citrus Grove

Well Site

Gate

White Fence

(Pauma Valley Country Club)

Country Club Well

Jerry Anderson

WDR T.E.C. 7/24/90

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

QUADRUPLICATE
Use to comply with local requirements

Do not fill in

No. **354793**

Notice of Intent No. _____
Local Permit No. or Date W30400

State Well No. _____
Other Well No. _____

(1) OWNER: Name Dick Nabers
Address 3225 Valley Center Rd.
City Valley Center, CA ZIP 92082

(2) LOCATION OF WELL (See instructions):
County San Diego Owner's Well Number _____
Well address if different from above at Pauma Valley
Township 10S Range 1W Section 16
Distance from cities, roads, railroads, fences, etc.
See attached

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well XX Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☑
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☑ Commercial
(Describe)

(5) EQUIPMENT:
Rotary ☒ Mud Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size 5/16" x #16
Diameter of bore 24"
Packed from 26 yds. ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	52	26" OD	.250
0	302	15.3	DR18

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
115	120	.057
134	152	"
184	320	"
230 - 245		"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval _____ ft.
Method of sealing Concrete

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion 115 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? R. Anderson
Type of test Test Pump ☒ Bailer ☐ Air lift ☒
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge 1200 gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? _____
Was electric log made Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth _____ ft. Completed depth 303 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	33	Med. to coarse, semi-consolidated sand w/layers of gravel & some boulders.
8	9	Light gravel & small cobble
	13.5	Rough drilling. Small boulders.
	17	Rough drilling
33	51	Med. to coarse sand w/some heavy gravel. Semi-consolidated. Drills tight.
51	53	Boulder
53	71±	Silty sand. Drills loose w/little chatter.
70	76	Sand content increasing
		Drills w/some chatter
76	86	Silt content increasing, very silty by 85'
88	96	Silt w/sand & light gravel
		Drills w/mod. chatter
99	104	Silty sand & gravel. Drills slower w/more chatter
	104	Boulder
	111	Rough spot
	124	Rough spot
125	128	Drills w/mod. to heavy chatter.
133.5	135	Rough drilling
135	143	Light to mod. chatter
143	144	Rough drilling
144	185	Moderately rough, slow drilling
	185	Rough drilling
191	202	Very rough drilling
202	208	Mod. rough drilling
250	265	.057 208-210 Rough drilling
280	297	" 210 - 214 Mod. rough to rough.
214	220	Mod. rough drilling, w/some loose rock
220	221	Mod. rough drilling to (Con

Work started 11/14 19 90 Completed 2/8 19 91

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ (Well Driller)
NAME REX ANDERSON CORP.
(Person, firm, or corporation) (Typed or printed)
Address P. O. Box 384
City Julian, CA ZIP 9203
License No. 305739 Date of this report 3/11/91

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355.

QUADRUPLICATE
Use to comply with local requirements

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 354794

Notice of Intent No. _____
Local Permit No. or Date W30400

State Well No. _____
Other Well No. _____

(1) OWNER: Name Dick Nabers
Address Hidden Oaks Rabnch - 3225 Valley
City Center Rd., Valley Center, ZIP 92082

(2) LOCATION OF WELL (See instructions):
County _____ Owner's Well Number _____
Well address if different from above _____
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. _____

Completed Well Construction
Date _____
Date Inspected 5/31/91
Comments Deal installation observed by M.L White
Water Sample Taken? No
Reviewed By C Nunnel

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe)

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☑ Size
Diameter of bore _____
Packed from _____ ft. to _____ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☐ If yes, to depth _____ ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval _____ ft.
Method of sealing _____

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? _____
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth _____ ft. Completed depth _____ ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
221	223	Mod. rough drilling
223	223.5	Mod. rough drilling, but slower (Possible boulder?)
226	227	Slow & smooth drilling.
		Boulder.
	229	Small boulder
	234	Rough drilling spot.
	244	Rough drilling spot.
245	253	Smooth drilling w/little chatter. Material appears to be coarse sub-rounded sand. Consolidated.
253	254	Rough drilling.
255.5		Rough spot
257	260	Rough drilling. Coarse sand w/boulders. Consolidated.
265	272	Moderately rough drilling
272	274	Rough drilling
274	276	Modrately rough drilling
276	281.5	Smooth drilling w/some chatter.
281.5	282	Rough drilling. Boulders
282	283.5	Mod. rough drilling
283.5	285	Rough.
285	286	Mod. to rough drilling
286	287	Very rough.
287	293.5	Rough
293.5	294	Very rough
294	296	Rough
296	297	Very rough.
297	300	Rough
300	303	Mod. rough

Work started 11/14 19 90 Completed 3/3/ 19 91

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ (Well Driller)
NAME REX ANDERSON CORP.
(Person, firm, or corporation) (Typed or printed)
Address P.O. Box 384
City Julian, CA ZIP 92036
License No. 305739 Date of this report 3/11/91

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355.

FORM #2

I hereby certify that:

I am a contractor licensed in the State of California, to perform the specific tasks for which I am presently applying. My license is in full force and effect, and will remain so to the best of my knowledge throughout the duration of this project.

My contractor's license is, as follows:

1. In the Name of: REX ANDERSON CORPORATION

2. State License No. A 305739

3. Classification: A
   (Class A or C42 required per Business & Professional Code Chapter 9, Section 7056, and California Administrative Code, Chapter 8 T-16, Section 754.4).

I am informed and understand that any false information could result in a penalty of not more than $500 for each violation, as provided in Business & Profession Code, Section 7031.5.

Signed: Rex Anderson

PUMP CHECK

Pumping Systems Analysts

Hydraulic Test Report

Since 1958

(951) 684-9801 • Lic. 408415 • Fax (951) 684-2988

Dick Nabers
Highway 76

Test Date: 09/02/2004
Pump type: SUB
Plant: Small Well

A test was made on this well pump and the following information was obtained

EQUIPMENT

PUMP:	No Data	SERIAL:	N/A
MOTOR:	Grundros	SERIAL:	N/A
H.P.	5.0	LAT/LON:	33.18.588n116.59.299w
METER:	29 062 438		

TEST RESULTS

	TEST 1	TEST 2	TEST 3
Discharge, PSI	44.0	31.0	21.0
Discharge head, feet	101.6	71.6	48.5
Standing water level, feet	198.2		
Drawdown, feet	0.3	1.6	1.9
Pumping water level, feet	198.5	199.8	200.1
Total pumping head, feet	300.1	271.4	248.6
Gallons per minute flow	**17**	**27**	**37**
Gallons per foot of drawdown	56.7	16.9	19.5
Acre feet pumped per 24 hours	0.075	0.119	0.163
KW input to motor	3.0	3.6	4.0
HP input to motor	4.1	4.9	5.4
Motor load, % BHP	60.4	72.4	80.6
Measured speed of pump, RPM	n/a		
KWH per acre foot	966.4	729.6	592.8
Overall plant efficiency in %	**31.8**	**38.1**	**42.9**

The above test results indicate various conditions under which this pump operates.

If you have any questions please contact Jon Lee at (951) 684-9801.

ANNUAL PUMPING COST ANALYSIS

Dick Nabers Test date: 09/02/2004

Plant: Small Well
H.P. 5

The following cost analysis is presented as an aid to your cost accounting and planning. It is an ESTIMATE based on the pump test data and your energy use during the previous 12-month period.

	EXISTING CONDITIONS		
Average Cost per kWh	$0.1000		
	Test 1	Test 2	Test 3
KW input to motor	3.0	3.6	4.0
Acre feet pumped per 24 hour day	0.075	0.119	0.163
KWh per acre foot	966.4	729.6	592.8
Pumping cost per hour	$0.30	$0.36	$0.40
Pumping cost per acre foot	$96.64	$72.96	$59.28
Overall plant efficiency	31.8	38.1	42.9
Expected efficiency, new pump, in %	45.0		
Cost savings in %	29.4		

E.S. BABCOCK & SONS, INC.
Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: Rancho Pauma Mutual Water Co.
Contact: Ogden Watson
Address: P.O. Box 423
Pauma Valley, CA 92061

Report Date: 23-Sep-2004

Project Name: Rancho Pauma MWC-DW-NC
Project Number: [none]
Work Order Number: A4I1048

Received on Ice (Y/N): Yes Temp: 17 °C

Laboratory Reference Number
A4I1048-02

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
Hidden Oaks Ranch High Yield	Water	09/14/04 08:10	09/14/04 10:45

Maximum contaminant level

Analyte(s)		Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Cations								
Total Hardness		240	3.0	mg/L	SM 3120B	09/16/04 17:42	mcm	
Calcium		62	1.0	mg/L	EPA 200.7	09/16/04 17:42	mcm	
Magnesium		20	1.0	mg/L	EPA 200.7	09/16/04 17:42	mcm	
Sodium		43	1.0	mg/L	EPA 200.7	09/16/04 17:42	mcm	
Potassium		3.6	1.0	mg/L	EPA 200.7	09/16/04 17:42	mcm	
Anions								
Total Alkalinity		160	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Hydroxide		ND	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Carbonate		ND	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Bicarbonate		190	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Sulfate	250	100	0.50	mg/L	EPA 300.0	09/14/04 20:53	cth	
Chloride	250	53	1.0	mg/L	EPA 300.0	09/14/04 20:53	cth	
Nitrate	45	22	1.0	mg/L	EPA 300.0	09/14/04 20:53	cth	
Nitrate as N		4.9	0.20	mg/L	EPA 300.0	09/14/04 20:53	cth	
Aggregate Properties								
pH		7.5	1.0	pH Units	SM 4500H+ B	09/14/04 17:30	aa	
Specific Conductance		690	1.0	umhos/cm	SM 2510 B	09/14/04 17:30	aa	
Temperature (at Lab)		25	1.0	°C	SM 2550B	09/14/04 00:00	mft	
Aggressive Index		11.9		N/A	Calculation			
Langlier Index @ 25 C		0.02		N/A	SM 2330 B	09/22/04 10:27	saf	
Solids								
Total Dissolved Solids	500	420	20	mg/L	SM 2540C	09/20/04 14:29	aa	

E.S. BABCOCK & SONS, INC.
Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: Rancho Pauma Mutual Water Co.
Contact: Ogden Watson
Address: P.O. Box 423
Pauma Valley, CA 92061

Report Date: 23-Sep-2004

Project Name: Rancho Pauma MWC-DW-NC
Project Number: [none]
Work Order Number: A4I1048

Received on Ice (Y/N): Yes Temp: 17 °C

Laboratory Reference Number
A4I1048-02

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
Hidden Oaks Ranch High Yield	Water	09/14/04 08:10	09/14/04 10:45

Analyte(s)		Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Surfactants								
MBAS	.50	ND	0.05	mg/L	SM 5540C	09/15/04 17:00	aa	
Metals and Metalloids								
Copper	1300	ND	10	ug/L	EPA 200.7	09/16/04 17:43	mcm	
Iron	300	180	20	ug/L	EPA 200.7	09/16/04 17:42	mcm	
Manganese	50	ND	10	ug/L	EPA 200.7	09/21/04 12:06	lmt	
Zinc	5000	ND	10	ug/L	EPA 200.7	09/16/04 17:42	mcm	

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Established 1906

NELAP #02101CA ELAP#1156
6100 Quail Valley Court Riverside, CA 92507-0704
P.O. Box 432 Riverside, CA 92502-0432
PH (951) 653-3351 FAX (951) 653-1662
www.babcocklabs.com

Client Name: Rancho Pauma Mutual Water Co.
Contact: Ogden Watson
Address: P.O. Box 423
Pauma Valley, CA 92061

Report Date: 23-Sep-2004

Project Name: Rancho Pauma MWC-DW-NC
Project Number: [none]
Work Order Number: A4I1048

Received on Ice (Y/N): Yes Temp: 17 °C

Laboratory Reference Number
A4I1048-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
Hidden Oaks Ranch Low Yield	Water	09/14/04 08:10	09/14/04 10:45

Maximum Contaminant Level

Analyte(s)		Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Cations								
Total Hardness		260	3.0	mg/L	SM 3120B	09/16/04 17:40	mcm	
Calcium		67	1.0	mg/L	EPA 200.7	09/16/04 17:40	mcm	
Magnesium		23	1.0	mg/L	EPA 200.7	09/16/04 17:40	mcm	
Sodium		47	1.0	mg/L	EPA 200.7	09/16/04 17:40	mcm	
Potassium		3.7	1.0	mg/L	EPA 200.7	09/16/04 17:40	mcm	
Anions								
Total Alkalinity		170	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Hydroxide		ND	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Carbonate		ND	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Bicarbonate		210	3.0	mg/L	SM 2320B	09/17/04 11:18	naa	
Sulfate	250	110	0.50	mg/L	EPA 300.0	09/14/04 20:46	cth	
Chloride	250	62	1.0	mg/L	EPA 300.0	09/14/04 20:46	cth	
Nitrate	45	27	1.0	mg/L	EPA 300.0	09/14/04 20:46	cth	
Nitrate as N		6.2	0.20	mg/L	EPA 300.0	09/14/04 20:46	cth	
Aggregate Properties								
pH		7.4	1.0	pH Units	SM 4500H+ B	09/14/04 17:30	aa	
Specific Conductance		770	1.0	umhos/cm	SM 2510 B	09/14/04 17:30	aa	
Temperature (at Lab)		25	1.0	°C	SM 2550B	09/14/04 00:00	mft	
Aggressive Index		11.8		N/A	Calculation			
Langlier Index @ 25 C		-0.02		N/A	SM 2330 B	09/22/04 10:27	saf	
Solids								
Total Dissolved Solids	500	480	20	mg/L	SM 2540C	09/20/04 14:29	aa	

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Client Name: Rancho Pauma Mutual Water Co.
Contact: Ogden Watson
Address: P.O. Box 423
Pauma Valley, CA 92061

Report Date: 23-Sep-2004

Project Name: Rancho Pauma MWC-DW-NC
Project Number: [none]
Work Order Number: A4I1048

Received on Ice (Y/N): Yes Temp: 17 °C

Laboratory Reference Number
A4I1048-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
Hidden Oaks Ranch Low Yield	Water	09/14/04 08:10	09/14/04 10:45

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Surfactants								
MBAS	50	ND	0.05	mg/L	SM 5540C	09/15/04 17:00	aa	
Metals and Metalloids								
Copper	1300	15	10	ug/L	EPA 200.7	09/16/04 17:40	mcm	
Iron	300	ND	20	ug/L	EPA 200.7	09/16/04 17:40	mcm	
Manganese	50	ND	10	ug/L	EPA 200.7	09/21/04 12:03	lmt	
Zinc	5000	38	10	ug/L	EPA 200.7	09/16/04 17:40	mcm	

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Report Date: 23-Sep-2004

Project Name: Rancho Pauma MWC-DW-NC
Project Number: [none]
Work Order Number: A4I1048

Received on Ice (Y/N): Yes Temp: 17 °C

Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit (RDL)
NR Not Reported

RDL = Reportable Detection Limit MDL = Method Detection Limit

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

☑ James K. Babcock, President ☐ Allison Mackenzie, General Manager ☐ Lawrence J. Chrystal, Laboratory Director

cc:

Short ESB Report